

HATCH OUTER WINDOW ASSEMBLY R&R

OBJECTIVE:

Remove and replace Hatch Outer
Window Assembly (P/N 683-13030-1)

LOCATION:

Installed: U.S. Common Hatch
Stowed: √ Maint Dbase

DURATION:

25 minutes

PARTS:

Hatch Inner Window Assembly (P/N 683-13030-1)

MATERIALS:

Dry Wipes
Deionized Water

TOOLS REQD:

KIT C:

7/16" Socket, 3/8" Drive

KIT D:

3/16" Hex Head, 3/8" Drive

5/32" Hex Head, 3/8" Drive

KIT E:

Ratchet 3/8" Drive

KIT G:

(30 - 200 in-lbs) Trq Wrench, 3/8" Drive

IVA Tool Box, Lid #1

Magnifying Glass 7x

REFERENCED PROC(S):

None

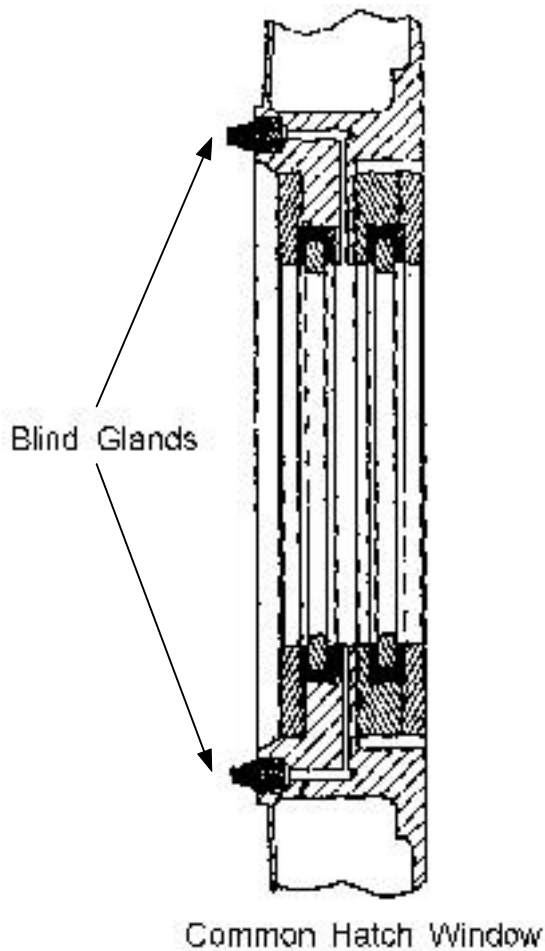


Figure 1.

WARNING

1. To ensure crew members have immediate ingress/egress between modules in case of emergency, hatch latches should not be engaged.
2. Failure to equalize pressure between inner and outer windows may prevent removal of failed inner pane.

NOTE

Hatch plate assembly contains two blind glands, only 1 needs to be removed to equalize pressure.

REMOVE

1. Remove nut securing blind gland to hatch plate assembly (Dome side) (Ratchet 3/8" Drive, 7/16" Socket)(Tm pry stow).
2. Translate to Rib side.
3. Place piece of tape on hatch under TEST to mark alignment for replacement window.
4. Remove fasteners(two) securing indicator assembly (Ratchet 3/8" Drive, 5/32" Hex Head)(Tm pry stow).

NOTE

1. 30 seconds must pass for pressure to equalize between inner and outer hatch windows.
2. Failed outer window assembly contains lubricated seals. Avoid smearing lubricant on hands, glass, or other hardware.

5. Loosen fasteners (ten) securing failed hatch outer window assembly to hatch plate assembly (Ratchet 3/8", 3/16" Hex head)(Tm pry stow).
6. Clean hatch plate window sealing surface (Dry Wipes, Deionized Water).
7. Dry hatch plate window sealing surface (Dry wipe).
8. Inspect hatch plate assembly window area for foreign material on surface (Magnifying Glass 7x).
9. If there is no foreign material or visible scratches on surface, continue procedure. Otherwise, reclean hatch plate window sealing surface.

REPLACE

NOTE

Replacement outer window assembly contains lubricated seals. Avoid smearing lubricant on hands, glass, or other hardware

10. Position replacement hatch outer window ORU kit hatch plate assembly by ensuring "TEST" is aligned with tape marker.
11. Align replacement hatch outer window ORU kit fasteners (ten) with holes (ten) in hatch plate assembly.
12. Visually inspect replacement hatch outer window assembly to ensure it is level.
13. If it is level, continue procedure. Otherwise reposition window and continue procedure.

NOTE

Sequence for fastening captive fasteners (ten) will start at top center right, moving to bottom center left and continuing in star pattern until all captive fasteners (ten) are started.

14. Tighten fasteners (ten) securing replacement hatch outer window assembly to hatch plate assembly (Ratchet 3/8" Drive, 3/16" Hex Head).
15. Visually inspect replacement hatch outer window assembly to ensure it is properly seated.
16. If properly seated go to step 17 of this procedure. Otherwise, continue procedure.
17. Loosen captive fasteners (10) securing hatch outer window assembly to hatch plate assembly (Ratchet 3/8" Drive, 3/16" Hex Head).
18. Adjust outer window assembly until it is fully seated.

19. Torque captive fasteners (ten) securing replacement hatch outer window assembly to hatch plate assembly 112 ± 9 in-lbs (30-200 in-lbs Trq Wrench, 3/16" Hex Head).
20. Visually inspect replacement hatch outer window assembly to ensure it is properly seated.
21. If not properly seated go to step 15 of this procedure. Otherwise continue procedure.
22. Tighten nut over blind gland until blind gland is seated with no free movement (Ratchet 3/8" Drive, 7/16" Socket).
23. Tighten nut over blind gland an additional eighth of a turn (Ratchet 3/8" Drive, 7/16" Socket).

POST MAINTENANCE

24. Stow failed Inner Window, tools, equipment.
25. Update Maint Dbase.